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THE ROLE OF NUCLEAR WEAPONS  
IN THE U.S. NATIONAL SECURITY  
STRATEGY AND THE ARMY

BY

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THE ROLE OF NUCLEAR WEAPONS IN THE  
U.S. NATIONAL SECURITY STRATEGY AND THE ARMY

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# ABSTRACT

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## INTRODUCTION

One of the toughest issues facing U.S. leaders in the future will involve the consolidation or elimination of selected roles and missions that have historically been the responsibility of one or more of the uniformed services. At present, one of the missions being continuously scrutinized is the role of nuclear weapons in the U.S. National Security Strategy.

Since World War II, nuclear weapons have been a major part of the Cold War build-up and the deterrence/containment of the Soviet Union. In fact, the simultaneous rise of the Cold War and the Nuclear Era have made these two historical events seem almost synonymous. However, with the demise of the Cold War and the breakup of the Former Soviet Union(FSU), the long standing threat to the U.S. and its allies seems to be disappearing. As the fear of a global nuclear war seemingly diminishes, this reopened a national debate concerning the role of nuclear weapons as an instrument of war and diplomacy in U.S. strategy.<sup>1</sup> While the current U.S. National Security Strategy calls for the need to maintain a strategic nuclear deterrence, the rising debate centers on the need for more simpler systems with the promise of a less threatening future. This debate was also fueled by the recent success of non-nuclear conventional forces, precision guided munitions and the technological superiority demonstrated during Desert Storm. As a result, Congress is turning its attention toward the domestic environment, and looking at conventional and nuclear force reductions as a source of funds for solving internal

problems; the so-called peace dividend.

The purpose of this paper is to discuss the role of nuclear weapons in the U.S. National Security Strategy. The intent is not to produce an emotional plea for the continued support, buildup, or eventual use of these lethal weapons. The only concern is that future leaders continue to consider all options in developing a coherent military strategy and not immediately give in to the presumptions that the only role for these weapons is deterring attack. Despite the waning of nuclear threat brought about by the end of the Cold War, the threats faced in the new world are uncertain and unpredictable. In this type of environment, the U.S. must not automatically accept the premise that certain roles of nuclear weapons are no longer needed or do not have to be explored. While the present number and yield of nuclear systems may be inappropriately large and out of date, future leaders must recognize that these weapons have, and will continue to have, a role in providing crisis stability in the new world, limiting proliferation of weapons and technology, and providing a viable warfighting option, if needed. In addition, to project a credible deterrent it is essential that each service maintain an organic nuclear capability as part of a balanced U.S. Military Strategy. Before discussing these roles, the next section will provide a brief summary of the current nuclear deterrence strategy and some of the recent changes impacting on U.S. nuclear forces.

## BACKGROUND

The U.S nuclear strategy that evolved over the last forty-eight years was based on the perceived threat, conventional and nuclear, facing the U.S. and its allies. This strategy relied on the threat of strategic and forward deployed nuclear forces to deter and contain the FSU.<sup>2</sup> In comparison, the current National Military Strategy still states the purpose of nuclear forces is to deter the use of weapons of mass destruction and to serve as a hedge against the emergence of an overwhelming conventional threat.<sup>3</sup> However, along with the breakup of the FSU came the collapse of the large Soviet Army and the perception there is no longer an overwhelming conventional threat that can challenge U.S. security.<sup>4</sup> As a result, U.S. leaders are shaping a security strategy to meet the dynamics of the new era. While deterrence still remains the primary and central motivating purpose underlying this strategy, the way strategic leaders approach security issues in the new world is changing. Where past strategy called for forward deployment, it now calls for forward presence and crisis response. Instead of large nuclear arsenals with multiple types of weapons, the current strategy is based on building a reliable warning system, the modernization and maintenance of a Triad of systems; Trident Submarines, Bombers, and Inter-Continental Ballistic Missiles, and establishing a defensive system for Global Protection Against Limited Strikes(GPALS).<sup>5</sup>

While the current strategy recognizes the uncertainty and

potential instabilities in the world, recent U.S. efforts have concentrated on controlling the size of nuclear arsenals and making the world a safer place to live. Efforts include the International Forces Agreement(INF), Conventional Forces Europe Initiative(CFE), Strategic Arms Reduction Talks(START I & II), Nuclear Non-Proliferation Treaties(NPT's) and many other arms control and disarmament initiatives. These actions are focused on reducing nuclear stockpiles, stopping the spread of weapons and delivery system technology, and properly maintaining existing arsenals. In addition, the INF and CFE agreements have virtually eliminated all current theater nuclear weapons from Europe, canceled all follow-on programs for continued development of these systems and eliminated the Army's nuclear role in the U.S. Military Strategy.<sup>6</sup>

In essence, the central theme during this historic time period is that the dissolution of the Soviet Union is providing the opportunity for eliminating the future need for weapons of mass destruction. However, as the U.S. moves toward a new dimension in nuclear strategy, it must continue to forge a strategy that is flexible and offers the options to respond to the unexpected.<sup>7</sup> While the opportunity to proceed on a new course is at hand, leaders must not forget it was the U.S. resolve to stand behind the nuclear weapon that was principally responsible for the downfall of the FSU and there may still be roles for these weapons which extend beyond deterrence. Some of these roles can be seen by looking at the new world order.



## NEW WORLD ORDER

The changes that have occurred in the world over the last several years and the increasingly active role the United Nations is playing are signals of a new world order consistent with U.S. values. However, as old is replaced by new, the current debate centers on whether nuclear weapons have a role in supporting U.S. national interest in an environment where regional, not global, issues are a greater concern. In the bipolar world of the past, the U.S. military strategy centered on a certain and fairly predictable threat. As a result, the U.S. built a conventional and nuclear force capable of meeting the challenge. This is no longer the case and leaders must now develop a military strategy to protect national interests in a world where the threat is unknown and the players are less rational in their actions.

Though it is tempting to think that the nuclear threat has been removed with the end of the Cold War, the collapse of the FSU created new complications and concerns. This is particularly true with regard to the security of weapons in the hands of countries that are an economic shambles, such as, Ukraine.<sup>8</sup> In addition, the continuous transformation of the new world to a more complex multipolar environment will create numerous other possible scenarios that must be considered in developing the U.S. National Security Strategy. Some of these include: surprises in the third world, national rivalries, personal ambitions, religious tensions and even economic trade disputes.<sup>9</sup> As the future unfolds, the debatable point is will the U.S. approach these uncertainties in

its Military Strategy by stressing the use of conventional and/or nuclear forces.

The advocates of a more conventional approach argue the focus in the new world is more regional and strong conventional forces are all that is required to dominate and deter threats against the U.S. and its allies. While this approach recognizes nuclear weapons will not go away, the perception is the most likely conflicts will be against less capable threats that have trouble employing their own forces and technology. The Gulf War supported this concept and demonstrated that technological superiority, collective security arrangements, and strategic agility of conventional forces can accomplish the mission without the need for nuclear forces.<sup>10</sup> Advocates of the conventional approach also argue that any threat to use nuclear weapons in a regional conflict would put political objectives at risk because of worldwide reaction and the possible threat of horizontal escalation.<sup>11</sup>

While recent world events lend support to the reduction of nuclear weapons in Europe and a worldwide strategy based more on conventional deterrence, leaders must carefully weigh future political, economic, and societal pressures to reduce the U.S. nuclear capability even further. Despite the lack of public support and the demands that defense be cut nor the coming of a new administration can change the fact that there are at least 30,000 nuclear warheads in the hands of several new republics in the FSU and an uncertain number in other potentially unfriendly hands.<sup>12</sup> What must also be considered is that as the world

becomes less certain and as Europe becomes less nuclear; the burden of deterrence and crisis stability in the new world will become more of a U.S. responsibility.<sup>13</sup> As a world leader, the policies and actions of senior leadership will have a significant impact on the order, or disorder, of the new world. However, regardless of the final outcome, U.S. interests will continue to lie in the encouragement of increased political, economic and military cooperation in Europe, the Pacific and other regions. As they have done in the past, nuclear weapons will play a role in supporting this process.<sup>14</sup>

Politically, these weapons represent an integral part of grand strategy and serve to assist the U.S. in managing the world political situation. While the focus of U.S. efforts is to continue to reduce the world's nuclear arsenal and build worldwide confidence in a nuclear free environment, it would be foolish to think that the presence of nuclear weapons and the way the U.S. handles them will not also play a key role in accomplishing these objectives. To begin with, they induce caution and discourage irresponsible behavior that almost all powers, or those that think they are powers, have habitual engaged.<sup>15</sup> In addition, the example set by proper stewardship of these weapons and the stability provided by their presence allows the U.S. to continue promoting the ideals of liberty, democracy, and peaceful coexistence through collective security arrangements, international education, and aggressive foreign policy.<sup>16</sup>

Politically and economically, U.S. interests lie in maintaining a solid relationship with its allies, especially

Germany and Japan. To accomplish this, U.S. allies must feel secure in the global environment. One of the ways the U.S. promotes this arrangement is by providing an umbrella of security which protects its allies from nuclear attack. In return, allies are more permissive of U.S. expansion into the international economic market. While this worked well in the past, the new world complexities are already beginning to impact on past arrangements and relationships. For example, a key dynamic in Eastern Europe today is the interaction between rising German economic power, the political strength of the European Community and the declining strength of Soviet influence. If U.S. leaders are not careful, they could see a breakdown in western security consensus and the emergence of a United Europe.<sup>17</sup> To resolve growing domestic and economic problems, the U.S. must continue to nurture this international cooperative arrangement. Strategic leaders must be careful not to reduce the conventional and nuclear forces beyond the point where allies lose confidence in the U.S. ability to provide extended deterrence, thus, force them to look elsewhere for security arrangements, or feel compelled to improve their own military capabilities.<sup>18</sup>

Nuclear weapons are just as important in maintaining military stability around the world. The world will always be a dangerous place and full of Saddam Husseins. Whether the FSU develops into democratic governments or returns to communism, they will always have a strong military force with nuclear weapons. The current increase in regional powers possessing lethal weapons and acquiring advanced technology, and the growth of regional weapon

inventories means the U.S. will face a more capable threat in a far more unpredictable and complex security environment.<sup>19</sup> While the perception generated by recent world events may call for smaller nuclear forces, there will still be a need for a credible and stabilizing National Military Strategy, including nuclear military options, that will assure allies of the U.S. ability to influence world events, deter aggression and provide the ultimate option of retaliation, if necessary. In addition, a U.S. nuclear capability also gives a psychological, as well as real, increase in military power. This is important in that "Power is the basis for successful diplomacy and military power has always been fundamental to international relations."<sup>20</sup>

The U.S. must also be prepared to defend its allies against a more lethal non-nuclear attack. Although the current deterrent umbrella does not extend to the use of nuclear weapons against chemical or biological weapons, the fear and uncertainty of a U.S. nuclear response can encourage prudence and caution concerning the use of these weapons.<sup>21</sup> This was recently demonstrated during Desert Storm. The threat by Israel to respond to an Iraqi chemical attack and the U.S. response to do whatever is necessary were key reasons chemical weapons were not employed.<sup>22</sup>

The end result is the role of U.S. nuclear weapons in the new world will be similar to the past. Although their principal purpose will be to ensure that weapons of mass destruction are never used, it is hardly irrational for the U.S. to continue deploying its resources in ways that advance its political, economic and security goals. The best way to do this is to retain

an adequate military presence overseas and an adequate overall security capability to deter new superpowers from taking actions that could set the stage for friction.<sup>23</sup> To accomplish this the U.S. will have to maintain a nuclear deterrent capable of doing what it did for the last forty-eight years in protecting its allies and assuring stability in the new world.<sup>24</sup>

#### NON-PROLIFERATION

Another purpose for nuclear weapons is to provide a deterrent against the proliferation of nuclear weapons and advanced technology. The current U.S. National Security Strategy states that no objective is more important or "urgent than stopping the global proliferation of nuclear, chemical and biological weapons, as well as the missiles to deliver them."<sup>25</sup> Clearly, one of today's biggest problems in proliferation is that access to basic nuclear physics and weapons engineering information is easier to obtain. In addition, more nations today possess the financial wherewithal to afford to buy the technology or the actual weapons. Together this gives many countries, or regional tyrants, the ability to acquire a lethal weapon capability and that is a scary thought. As it stands, there are at least nine countries that have or can create nuclear weapons and there are many others in pursuit of the technology.<sup>26</sup> Fifteen nations already have a ballistic missile capability and it is anticipated that this will probably rise to twenty in the next ten years. Lastly, factor in the disintegration of the FSU, with over 30,000 biological and

nuclear weapons, and this could heavily impact on the wide scale proliferation of lethal weapons and delivery system technology.<sup>27</sup>

To stop proliferation, Nuclear Non-Proliferation Treaties (NPTs) have been ongoing since the late Sixties. Current U.S. efforts include: strengthening existing arms control arrangements (NPTs, export controls and criminal penalties); expanding membership of nations against proliferation; and the pursuit of new initiatives (chemical weapons conventions). The problem is history has proven international agreements can't do it alone. Implementation of the NPT in 1970 failed to dissuade Israel, India and Pakistan from developing nuclear capability. Iraq, a party to the 1925 Geneva Protocol and the 1968 NPT, violated these agreements and it was recently discovered that chemical weapons facilities in Libya and Iraq received equipment from Western Countries. Complicating this process even further are the many changes taking place in the current world order. In the economically distressed FSU, some of the new countries that have formed contend they are not bound by any previous nuclear agreements and the strategic nuclear systems located in their country belong to them. As a result, countries like Ukraine are threatening to sell their nuclear weapons to the highest bidder to help ease their economic troubles.<sup>28</sup> The possible proliferation of these 30,000 FSU weapons could easily overwhelm current treaty inspections and other elements of the non-proliferation efforts.<sup>29</sup>

In terms of conventional intervention, it also lacks the ability, by itself, to prevent the spread of nuclear and other lethal weapons. Although the perception exists that this was not

the case during Desert Storm, the use of military force alone to prevent further proliferation will rarely be an attractive alternative because of the risk of retaliation by target countries against U.S. forces.<sup>30</sup>

Thus, what has evolved out of the Cold War termination is not the opportunity to bury or eliminate the threat of nuclear weapons forever. To the contrary, a new and equally important role has emerged for these systems in the post-Cold War era. That role will be to serve as an integral part of non-proliferation efforts and containment strategies. The U.S. nuclear ability, combined with international agreements and conventional forces, will continue to provide an umbrella of security and assistance to U.S. forces abroad and the nuclear non-proliferation treaty regime. This umbrella serves to encourage alliance with the U.S., thus reducing the incentive for nations to develop their own capability. Consequently, the added impact of nuclear weapons superiority gives the U.S. prevalence in influencing behavior which can deter proliferation, dissuade non-aligned countries from pursuing a nuclear capability and provide crisis stability to a regional conflict, such as, the Cuban Missile Crisis in the early Sixties.<sup>31</sup>

The key to remember in the proliferation effort is that nuclear weapons cannot be un-invented.<sup>32</sup> They are a reality that must be dealt with in a new perspective. While the demise of the Cold War and the elimination of a global threat have provided a golden opportunity to reduce reliance on them for world peace, the promotion and protection of democratic ideals in the new world



must be handled cautiously and wisely. For the near term, it is unlikely that all nations with a nuclear capability, and those that are pursuing one, can be readily convinced to desist immediately. As a result, the necessity for them can only be whittled away through careful and graduated efforts.

The initiative of President Bush in his pursuit of START and his personal initiatives with Soviet and Russian Presidents Gorbachev and Yeltsin have set the stage for the first major attack on proliferation.<sup>33</sup> While these initiatives will greatly reduce the number of weapons worldwide, the subsequent availability of weapons and technology to other countries will also increase. Thus, it is imperative that the U.S. seize the opportunity to promote the notion that the possession of nuclear weapons by other nations is not required nor will it be tolerated.

The transition from a bipolar, nuclear threatened, superpower arrangement to the present unipolar, U.S. lead, nuclear tenuous world order, into a multipolar, non-nuclear, inter-dependent free world can become a reality.<sup>34</sup> The continued presence and deterrent use of nuclear weapons by the U.S. is essential to the achievement of this goal. Only under this umbrella can proliferation be safely deterred while development of the new world evolves. While threats to the achievement of this new world order exist, and the prospects of nuclear confrontation still loom, wholesale elimination of U.S. controlled nuclear weapons would be the ultimate act of irresponsibility. Given the present state of uncertainty in world affairs, the U.S. must recognize the potential for disarray, revolution, and opportunists.

Finally, while nuclear weapons will play a continuing role in preventing proliferation, the importance of U.S. leadership cannot be overstated. The ability to instill confidence in every dimension of international affairs, to promote economic growth and interdependency while encouraging the development of democracy will dictate the necessity for non-proliferation of nuclear weapons now and in the future.

### WARFIGHTING

Aside from performing crisis stability in the new world, and playing a part in nuclear non-proliferation, nuclear weapons have a warfighting role. The problem is that this has always been a difficult concept to accept. Since the destruction of two Japanese cities at the end of World War II it has been difficult to view the use of nuclear weapons as having any role in U.S. Military Strategy which extends beyond deterrence.<sup>35</sup> As mentioned earlier, when the Cold War ended and the focus shifted to regional challenges and opportunities, the U.S. took the lead in promoting arms control and disarmament initiatives. While these actions are warranted and designed to make the world a safer place to live, they must be taken cautiously. In a world where the threat is unknown, proliferation of advanced weapons and delivery system technology is a problem, and regional instability and irrational behavior are the norm, the past role of nuclear weapons may take on as much, or even greater, significance in the future.

While some argue that regional conflicts will never involve

the use of nuclear weapons, the uncertainty of the future requires a balanced strategy that can respond to a multitude of threats from nations and leaders who may not have anything to lose in employing nuclear weapons.<sup>36</sup> This uncertainty about non-deterrable nuclear threats make it all the more important to maintain a range of credible warfighting options.<sup>37</sup> Although current strategy emphasizes strategic deterrence as the key role for nuclear weapons, it retains the right of first use. Despite the President's September 1991 speech announcing major cuts in non-strategic nuclear weapons and further proposals in his 1992 State of the Union Address, the U.S. has never negated the idea of using nuclear weapons.<sup>38</sup> However, recent initiatives have virtually eliminated all tactical nuclear weapons and reduced some of the warfighting options the U.S. is able to employ. For instance, if deterrence fails it may be in the American interest to keep a war as limited as possible.<sup>39</sup> Tactical nuclear weapons could support this with low-yield and low collateral damage weapons.

The problem is the image of nuclear weapons is one of absolute destruction and they are not seen as a warfighting option. However, in reality, "current technology is capable of producing nuclear weapons that do not have the destructiveness and radioactivity associated with earlier models."<sup>40</sup> Developments over the last forty years have resulted in enhanced, suppressed and induced radiation weapons. These weapons can be designed to confine damage to the immediate target area or the effects can be tailored to order. "Further, the advent of tailored effects

weapons increasingly enhances the utility of tactical nuclear weapons on the battlefield."<sup>41</sup> In fact, tactical weapons can also be designed to cause less damage than the use of certain conventional weapons.<sup>42</sup> One example might be a mini-nuke with a yield of 10 tons or less (20,000 pounds of high explosive). This is comparable to a conventional weapon and could be designed to be compatible with air, sea, and ground delivery systems. Another example might be a low-yield bunker buster designed to destroy a heavily fortified target with negligible residual effects. This could serve as a "strong deterrent to a tyrant who might otherwise think, if Saddam can survive a war with the U.S., I can too."<sup>43</sup> Other exotic technological warheads could deliver localized electromagnetic pulse to disrupt communications and electronic gear. This could be very effective against airfields and prevent the need for repeated conventional bombings.<sup>44</sup>

While the destructive image of nuclear weapons may be difficult to change, it is important for strategic leaders to remember "that despite the incentives to keep a conventional war limited, once fighting begins it would be difficult to control escalation to the nuclear edge."<sup>45</sup> Thus, the U.S. must maintain a warfighting capability, strategic and tactical, that can respond to other countries with similar capabilities. "American strategy must face up to the unwelcome idea that being able to fight with nuclear weapons is the last, maybe the only way to avoid war."<sup>46</sup> Although some argue the use of tactical nuclear weapons will result in immediate escalation, the reality is the use of tactical

nuclear weapons can imply a distancing from the action, a lower rung on the escalation ladder, and a firebreak to a strategic exchange. In essence, the more options available to the U.S., the less chance there is for immediate escalation to total nuclear war.<sup>47</sup>

The question of whether nuclear weapons have a role as an element of containment and warfighting strategies is a difficult one to answer. However, it would seem that through the further development of lower yield weapons with increased accuracy, limited collateral damage and controlled radiation, an improved nuclear weapon would have a role in accomplishing the objectives outlined in the National Military Strategy.

#### ARMY'S ROLE

The decision to remove the Army from the nuclear business is also based on the loss of a global threat and the need to reduce the world's nuclear arsenal. As mentioned earlier, advocates of a non-nuclear conventional Army contend that post Cold War conflicts will most likely be against less powerful regional threats that have difficulty employing their own technology. In addition, U.S. technological advances, especially with precision guided munitions, negate the need for future tactical nuclear weapons.<sup>48</sup> However, in a world where any country can acquire a nuclear capability, there is no reasonable argument which suggests that conventional weapons alone can be a credible deterrent against a

nuclear armed adversary who has the will to use them.<sup>49</sup> As a result, the U.S. must maintain sufficient options so that an appropriate response is available despite even the most adverse conditions.<sup>50</sup> This translates into the need for the U.S. to maintain a balanced conventional and nuclear capability in the air, on the sea and on the ground, to best support the National Military Strategy.

To begin with, the degree of flexibility afforded a commander is maximized when all services maintain a nuclear capability, especially one incorporating advanced tactical nuclear weapons developments. This diversity and duplicity of roles among the services increases the survivability of these systems and the credibility of deterrence which enhances stability.<sup>51</sup> Another advantage in maintaining an Army organic capability is that ground systems are dual capable. This is important for planners who must consider the stabilizing or destabilizing effects of moving nuclear weapons into a region. The possibility of provoking a situation is reduced if systems organic to deployed forces are dual capable.<sup>52</sup> In addition, low-yield packages are easily deployable with ground forces and best support deterrence of small regional powers. The various yields and types of weapons associated with ground forces also create more options for commanders, especially in limiting collateral damage and radioactivity.

In comparing current systems, it is unrealistic for a ground commander to rely on the Navy and Air Force to provide nuclear

weapons in response to a lethal weapon attack against ground forces. From a strategic level, the employment of one of the Triad of systems in a small regional conflict would be politically unacceptable and highly unlikely. These systems are too large in destructive power and their use would put political objectives at risk because of global reaction.<sup>53</sup> From a tactical nuclear weapon perspective, current Air Force and Navy systems are not designed to support ground operations. To begin with, they would have to develop appropriate tactical nuclear weapons to properly support Army needs. Unlike ground systems which can hide and disperse across the battlefield, Air and Navy systems are not as survivable and responsive. Air delivered systems are also dependent on maintaining friendly air superiority and the accuracy of these systems can be affected by inclement weather. Both Navy and Air Force systems are primarily designed for use against fixed versus mobile targets. In addition, the Air Force, Navy and Army would have to increase joint training in terms of employment and coordination of tactical nuclear weapons support.<sup>54</sup> In essence, with the current emphasis on budget downsizing, the Army cannot rely on its sister services to set any of the above as a high priority. Thus, the Army needs to maintain its own organic capability.

With the end of the Cold War and forward basing capabilities being reduced, the developing security strategy is trying to contend with situations where troops will have to make a forced entry into a potential war zone to protect U.S. interests and

those of its allies. Grenada, Panama, and Desert Storm are recent examples of this necessity. The problem is that as the U.S. deciphers lessons learned from past contingencies so that it is better prepared to respond to future conflicts, its enemies are doing the same. For example, the U.S. success during Desert Storm can be largely attributable to the amount of time it had to build-up forces. In the future, a tyrant might not allow this to happen and attack U.S. forces while they still lack fighting power. This would have been devastating in the early stages of the Desert Shield deployment. In addition, the ease in acquiring lethal weapons and delivery systems complicates this process.<sup>55</sup> An Army organic capability consisting of deployable low-yield packages provides an instant security umbrella when deployed and may allow additional time, protection, and build-up of forces in a regional conflict. It would also provide the firepower and limited nuclear option to halt an enemy offensive or prevent a tyrant's early use of lethal weapons. Finally, the dual capability of Army systems give commanders a super defensive option because each howitzer and missile represents a potential nuclear delivery system.<sup>56</sup>

In the past, the strategy of flexible response and forward defense were intended to deter any possible attack from minor incursions to all out nuclear war. This strategy posed a range of options to aggression including direct defense, deliberate escalation and general nuclear response.<sup>57</sup> Now that the U.S. has shifted to a strategy of crisis response and forward presence, and



stripped the Army of its nuclear role, the middle ground between the U.S. ability to respond and general nuclear war is missing. While some would say conventional forces are all that is needed, or the Air Force and Navy could provide the limited response, this is arguable. The uncertainty of the future demands strong conventional forces combined with an effective nuclear deterrent that will give the impression the U.S. will defend by all means.<sup>58</sup> In addition, the U.S. must have options besides doing nothing and using inappropriately large weapons.<sup>59</sup> The use of Air Force and Navy systems have always been viewed as strategic, not tactical, and that would be a difficult perception to change. Thus, an Army capability gives the U.S. the flexibility of a limited option.

Maintaining a nuclear capability in the Army provides another means to achieve political and economic objectives. This is important in an environment where leadership attention has turned to solving internal domestic and economic problems using Defense as a bill payer. However, as a world leader, the U.S. must still provide a credible deterrent against attack of itself and its allies. As leaders wrestle with how to reduce defense spending, they must not forget that an organic nuclear capability is less costly to maintain than a large conventional Army. In fact, for over forty years the U.S. relied on this strategy in defending Western Europe. In addition, a smaller forward based Army, balanced in nuclear and conventional capability, would still serve to provide a visible link to U.S. commitment and the preservation of peace around the world.

Finally, while U.S. strategy emphasizes deterrence, it also retains the right of first use. This policy serves to prevent the increase of conventional and nuclear war by intimidating and instilling fear of repercussion if a regional tyrant increases his military activity. As a result, an aggressor can never be sure how the U.S. will respond. Such uncertainty of response is required in an uncertain world. Thus, in the interest of National Security, the Army must maintain a nuclear capability to balance its response, protect its deployed resources, and give the aggressor something else to worry about.<sup>60</sup>

#### CONCLUSION

In conclusion, the role of nuclear weapons will always extend beyond deterrence of attack against the U.S. and its allies. The rigidity and certainty of the previous bipolar world is transforming into a multipolar world of complexity and uncertainty. The fixed alliances and known adversaries of the past have been replaced by ad hoc coalitions and alliances, and ambiguous threats. In such an environment, the continuous promotion and protection of democratic ideals rest with the U.S. which now, more than ever, must continue to be the stabilizing force in the new world. To accomplish this, senior leaders are challenged with developing a coherent strategy which includes the right balance of political, economic, military and psychological options to maintain global and regional balances, and resolve

disputes. While reduction of the world's nuclear arsenal and responsible stewardship of remaining weapons are important steps toward making the world a safer place to live, it is important to remember that nuclear weapons will never go away. In fact, until the dust settles and order is restored again in the new world, these weapons will continue to play a role in the U.S. National Security Strategy; providing security and stability; limiting proliferation of nuclear, chemical and biological weapons; and, providing strategic and tactical warfighting options, if needed. In addition, the U.S. must maintain sufficient options so that an appropriate response is available despite even the most adverse conditions. Eliminating the Army from the nuclear arena is not the answer. In reality, it is essential the U.S. maintain a balanced conventional and nuclear capability within each service to best support the U.S. National Security Strategy.



## ENDNOTES

1. Guertner, Gary L., Deterrence and Conventional Military Forces, Selected Readings: War National Policy and Strategy Vol III, (U. S. Army War College: 26 August - 19 October 1992) p152.
2. The White House, National Security Strategy of the United States, (Washington, D.C.: August 1991) p1.
3. Joint Chiefs of Staff, National Military Strategy of the United States (Washington, D.C.: 1992) p13.
4. Secretary of Defense, Annual Report to the President and the Congress, (Washington, D.C.: 1992) pVI.
5. National Military Strategy of the United States, pp1,6-7.
6. The Role of Nuclear Weapons in the New World Order, Selected Reading: War, National Policy and Strategy, Vol III, (U. S. Army War College: 26 August - 19 October 1992) pp167-223.
7. National Military Strategy of the United States, p13.
8. Away from the Abyss, Nuclear Pact Comes as Welcome News, The Patriot Newspaper, (Harrisburg, Pennsylvania: 31 December 1992), pA8.
9. National Security Strategy of the United States, pV.
10. Deterrence and Convention Military Forces, pp155-159.
11. Ibid., p153.
12. Weinberger, Casper W., Strategic Defense - We Still Need It, (Forbes Magazine: 21 December 1992), p35.
13. The Role of Nuclear Weapons in the New World Order, pp180-181.
14. National Security Strategy of the United States, pp1-3.
15. Gaddis, John Lewis, How Relevant Was U.S. Strategy in Winning the Cold War?, (Strategic Studies Institute, U.S. Army War College: 17 March 1992), p8.
16. Jersild, Paul T., and Johnson, Dale A., Moral Issues and Christian Response, (Holt, Rinehart and Winston, Inc., Fort Worth, Texas: 1988), p263.

17. Army Plan(Unclassified), Deputy Chief of Staff for Operations, (Washington,D.C.: 1992), p13.
18. The Role of Nuclear Weapons in the New World Order, pp180-181.
19. Army Plan(Unclassified), Deputy Chief of Staff for Operations, (Washington,D.C.: 1992), p15.
20. Summers, Harry., Congress Has Clinton's Ear On Military Issues, Army Times, (Washington, D.C.: November 1992), p35.
21. Harvard Nuclear Study Group, Living with Nuclear Weapons, (Harvard: University Press., 1983), p5.
22. Sperta, Leonard S., Deterring Regional Threats From Nuclear Proliferation, (Strategic Studies Institute, U.S. Army War College: 12 March 1992), p3.
23. Bergsten, Fred C., The Primacy of Economics, Course 5, Regional Studies Appraisals, Common Readings, Term II, (U.S. Army War College: 4 January-4 March 1993), p32.
24. The Role of Nuclear Weapons in the New World Order, p172-174.
25. National Security Strategy of the United States, p15.
26. Deterring Regional Threats from Nuclear Proliferation, p5-19.
27. Annual Report to the President and the Congress, pVI.
28. Ukraine Threatens to Auction N-Missiles, The Patriot Newspaper, (Harrisburg, Pa: 23 November 1992), pA11.
29. National Security Strategy of the United States, p15.
30. Deterring Regional Threats from Nuclear Proliferation, p19.
31. Cimbala, Stephen J., Clausewitz and Escalation, (Frank Cass and Co. LTD., London, England., 1991), p159.
32. Eccles, Henry E., Strategy-The Theory and Application, Naval War College Review, May-June 1979, p15.
33. Gorbachev's Response to the Bush Nuclear Weapons Initiative, (Carlisle PA: Strategic Studies Institute, U.S. Army War College, Winston, Inc., 1988) p23.
34. Krauthammer, Charles., The Unipolar Moment, Foreign Affairs, 70,(1989) p23.

35. Rose, John P., Nuclear Weapons: Image Versus Reality. Military Strategy: Theory and Application, (U.S. Army War College: 6 June 1989) p335.
36. National Security Strategy of the United States, p26.
37. Deterrence and Conventional Military Forces, p159.
38. Arkin, William and Norris, Robert S., Tiny Nukes for Mini-Minds, The Bulletin of Atomic Scientists, (48: 24-25, April 1992) p24.
39. Living with Nuclear Weapons, p144.
40. Nuclear Weapons: Image Versus Reality, p335.
41. Ibid., p338.
42. Ibid., p338.
43. Tiny Nukes for Mini-Minds, pp24-25.
44. Ibid., pp24-25.
45. Living with Nuclear Weapons. p67.
46. Cline, Ray, Metastrategy: National Security Memorandum for the President, p20.
47. Nuclear Weapons: Image Versus Reality, p339.
48. Deterrence and Conventional Military Forces, p156.
49. Tiny Nukes for Mini-Minds, p24.
50. Ramos, Thomas F., The Future of Theater Nuclear Forces, Strategy Review, (United States Strategic Institute: Washington, D.C.) 19, No. 4 (Fall: 1991) p45.
51. Ibid., p45.
52. Ibid., p44.
53. Deterrence and Conventional Military Forces, p153.
54. Why an Organic Nuclear Capability for the Army, U.S. Army Field Artillery Center, Combat Development, October 1990, pp1-2.
55. Dowler, Thomas W. and Howard, Joseph S., Countering the Threat of the Well Armed Tyrant: A Modest Proposal for Small Nuclear Weapons, Strategy Review, (United States Strategic Institute: Washington, D.C.), 19, No. 4 (Fall: 1991) p35.

56. Why an Organic Nuclear Capability for the Army, pp1-2.
57. Galvin, John R., General, Flexible Response and Forward Presence, Defense, (Washington, D.C.: 1988) p6.
58. Ibid., p7.
59. Tiny Nukes for Mini-Minds, pp24-25.
60. Flexible Response and Forward Presence, p8.



## BIBLIOGRAPHY

- Anderson, Jack and Binstein, Michael, "Iran in the Early Stages of Developing Nuclear Weapons". The Patriot Newspaper, Harrisburg, Pa.: 15 December 1992, pA10.
- "Arms Control and National Security: An Introduction". Arms Control Association, Washington, D.C., 1989.
- Aspin, Les., "With the Soviets and the Cold War Gone, What is the Future for U.S. Forces"? ROA National Security Report, Washington, D.C.: November 1992, p21-25.
- Arkin, William and Norris, Robert S., "Tiny Nukes for Mini-Minds". The Bulletin of Atomic Scientists, Vol 48: 24-25, April 1992, p24.
- "Army Plan(Unclassified)". Deputy Chief of Staff for Operations, Washington, D.C.: 1992, p13-15.
- "Away from the Abyss, Nuclear Pact Comes as Welcome News". The Patriot Newspaper, Harrisburg, Pennsylvania: 31 December 1992, pA8.
- Bergsten, Fred C., "The Primacy of Economics, Course 5, Regional Studies Appraisals, Common Readings, Term II". U.S. Army War College: 4 January-4 March 1993, p32.
- Brodie, Bernard, "The Development Of Nuclear Strategy, Selected Readings: War National Policy and Strategy, Vol III". U.S. Army War College: 26 August - 19 October 1992, p284.
- Bundy, McGeorge., "Nuclear Weapons and the Gulf, Selected Readings: War National Policy and Strategy, Vol III". U.S. Army War College: 26 August - 19 October 1992, p224.
- Cimbala, Stephen J., "Clausewitz and Escalation". Frank Cass and Co. LTD., London, England., 1991, p159.
- Cline, Ray, "Metastrategy: National Security Memorandum for the President". p20.
- Dowler, Thomas W. and Howard, Joseph S., "Countering the Threat of the Well Armed Tyrant: A Modest Proposal for Small Nuclear Weapons". Strategy Review, United States Strategic Institute: Washington, D.C., 19, No.4, Fall: 1991, p35.
- Eccles, Henry E., "Strategy - The Theory and Application". Naval War College Review, May-June 1979, p15.

- Gaddis, John Lewis, "How Relevant Was U.S. Strategy in Winning the Cold War"? Strategic Studies Institute, U.S. Army War College: 17 March 1992, p8.
- Galvin, John R., General, "Flexible Response and Forward Presence". Defense, Washington, D.C.: 1988 , p6.
- "Gorbachev's Response to the Bush Nuclear Weapons Initiative". Carlisle PA: Strategic Studies Institute, U.S. Army War College, Winston, Inc., 1988, p23.
- Guertner, Gary L., "Deterrence and Conventional Military Forces, Selected Readings: War National Policy and Strategy Vol III". U. S. Army War College: 26 August - 19 October 1992, p152.
- Hallenbeck, Ralph A., and Shaver, David E., "On Disarmament: The Role of Conventional Arms Control in National Security Strategy". Strategic Studies Institute, U.S. Army War College, Carlisle Barracks, Pa., 1990.
- Harvard Nuclear Study Group, "Living with Nuclear Weapons". Harvard: University Press., 1983, p5.
- Harvard Study Group, "The Realities of Arms Control, Selected Readings: War National Policy and Strategy, Vol III". U.S. Army War College: 26 August - 19 October 1992, p392.
- Jersild, Paul T., and Johnson, Dale A., "Moral Issues and Christian Response". Holt, Rinehart and Winston, Inc., Fort Worth, Texas: 1988, p263.
- Jervis, Robert., 'Political Effects of Nuclear Weapons". International Security, Vol 13: Fall 1988, pp80-90.
- Joint Chiefs of Staff, "National Military Strategy of the United States". Washington, D.C.: 1992, p13.
- Jordan, Amos A., and Taylor, William J., "American National Security: Policy and Process". Johns Hopkins University Press, 1987.
- Krauthammer, Charles., "The Unipolar Moment". Foreign Affairs, Vol 70, 1988 p23.
- Luttwak, Edward N., "Why Arms Control Has Failed, Selected Readings: War National Policy and Strategy, Vol III". U.S. Army War College: 26 August - 19 October 1992, p382.
- Newhouse, John., "Cold Dawn: The Story of SALT". Holt, Rinehart, and Winston, 1974.

- Ramos, Thomas F., "The Future of Theater Nuclear Forces". Strategy Review, United States Strategic Institute: Washington, D.C., Vol 19, No.4, Fall: 1991, p45.
- Reed, Thomas C., and Wheeler, Michael O., "The Role of Nuclear Weapons in the New World Order, Selected Reading: War, National Policy and Strategy, Vol III". U. S. Army War College: 26 August - 19 October 1992, pp167-223.
- Rose, John P., "Nuclear Weapons: Image Versus Reality, Military Strategy: Theory and Application". U.S. Army War College: 6 June 1989, p335.
- Rosenberg, David Alan, 'U.S. Nuclear Strategy: Theory and Practice, Selected Readings: War National Policy and Strategy, Vol III". U.S. Army War College: 26 August - 19 October 1992, p328.
- Schandler, Herbert Y., 'U.S Policy on the Use of Nuclear Weapons, 1945-1975, Selected Readings: War National Policy and Strategy, Vol III". U.S. Army War College: 26 August - 19 October 1992, p281.
- Secretary of Defense, "Annual Report to the President and the Congress". Washington, D.C.: 1992, pVI.
- Sperta, Leonard S., "Deterring Regional Threats From Nuclear Proliferation". Strategic Studies Institute, U.S. Army War College: 12 March 1992, p3.
- Summers, Harry., "Congress Has Clinton's Ear On Military Issues". Army Times, Washington, D.C.: November 1992, p35.
- Talbot, Strobe., "Endgame: The Inside Story of SALT II". Harper Torchbooks, 1980.
- Talbot, Strobe., "Deadly Gambits". Vintage Books, Random House, 1985.
- The White House, "National Security Strategy of the United States". Washington, D.C.: August 1991, p1.
- "Ukraine Threatens to Auction N-Missiles". The Patriot Newspaper, Harrisburg, Pa: 23 November 1992, pA11.
- Weinberger, Casper W., "Strategic Defense - We Still Need It". Forbes Magazine: 21 December 1992, p35.
- "Why an Organic Nuclear Capability for the Army". U.S. Army Field Artillery Center, Combat Development, October 1990, pp1-2.